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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,853	12/14/2001	Janette Lin	P14738-PUCN	7417

7590 02/03/2005
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EXAMINER

NGUYEN, DAVID Q

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 02/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/016,853

Applicant(s)

LIN ET AL.

Examiner

David Q Nguyen

Art Unit

2681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2,5-6,9-10, and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Granberg (US 6,101,382) in view of Tomoike (JP410013945A).

Regarding claims 1,5,9 and 13, Granberg teaches a method of using of roaming numbers in a wireless telecommunications system, and the method comprising:

receiving a call request for a mobile terminal at a Gateway Mobile Switching Center (GMSC) (see fig. 1 and 2 and description); sending a request for routing information from said GMSC to a Home Location Register (HLR) associated with said mobile terminal (see fig. 1 and 2 and description); sending a request for a roaming number from said HLR to a Mobile Switching Center (MSC) associated with the roaming area in which said mobile terminal is geographically located (see fig. 1 and 2 and description); allocating, by said MSC, a roaming number for said mobile terminal (see fig. 1 and 2 and description); sending a response to said request for roaming number from said MSC to said HLR, said response including said roaming

Art Unit: 2681

number (see fig. 1 and 2 and description); receiving said roaming number at said HLR (see fig. 1 and 2 and description); sending said roaming number from said HLR to said GMSC (see fig. 1 and 2 and description); sending a call setup request from said GMSC to said MSC, said call setup request including said roaming number (see fig. 1 and 2 and description). Granberg does not disclose assigning, by said MSC, an authentication code to said roaming number, said response including said authentication code, receiving said authentication code at HLR and sending said authentication code from HLR to said GMSC.

However, Tomoike discloses assigning an authentication code to said roaming number, said response including said authentication code, receiving said authentication code at HLR and sending said authentication code from HLR to said GMSC (see abstract). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the call setup procedure of Granberg with authentication process of Tomoike to obtain a wireless telecommunication system as proposed in the instant application in order to protect the network against unauthorized access, and to protect the privacy of users.

Regarding claims 2,6,10 and 14, the method of Granberg in view of Tomoike also discloses wherein said authentication code is a function of said roaming number (see abstract).

3. Claims 3-4,7-8,11-12 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Granberg (US 6,101,382) in view of Tomoike (JP410013945A) and further in view of Grootwassink (US 6725037).

Regarding claims 3-4,7-8,11-12 and 15-16, the method of Granberg in view of Tomoike does not disclose an authentication as a function of the time at which said roaming number is

Art Unit: 2681

requested, or the date on which said roaming number is requested. However an authentication procedure using such subscriber information is taught by Grootwassink.

Grootwassink teaches the use of various validation data during authentication including the user's mobile phone number, and user profile data (col. 5: lines 1-5). Although Grootwassink does not expressly mention date and time, it is obvious that these items are a part of user profile data, as they are necessary in the billing of any mobile phone call. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine call setup and authentication procedure of Granberg in view of Tomoike with the validation data of Grootwassink to allow a particular user to access a communications network.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Anvekar et al. (US 2002/0197991 A1) teaches roaming in wireless networks with dynamic modification of subscriber identification.

Lahtinen (US 6,157,832) teaches service-dependent routing of a mobile terminating call in a mobile communication system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Q Nguyen whose telephone number is 703-605-4254. The examiner can normally be reached on 8:30AM-5:30PM.

Art Unit: 2681

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Nguyen



DAVID HUDSPETH
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